ORIGINATION FORM

Proposed Revisions to the Specifications

(Please provide all information - incomplete forms will be returned)

Date:	Of	Office:		
Originator:	Sp	Specification Section:		
Telephone:	Article/Subarticle:			
email:	As	Associated Section(s) Revisions:		
Will the proposed revision require changes to the following Publications:				
Publication	Yes	No	Office Staff Contacted	Date
Standard Plans Index				
Traffic Engineering Manual				
FDOT Design Manual				
Construction Project Administration Manual				
Basis of Estimate/Pay Items				
Structures Design Guidelines				
Approved Product List				
Materials Manual				
Maintenance Specs				
Will this revision necessitate any of the followi	ng:		J	
Design Bulletin Construction (DCE Men	no)	Estima	ates Bulletin Materials Bulle	etin
Have all references to internal and external pul	olications i	n this Sec	ction been verified for accuracy?	
Synopsis: Summarize the changes:				
Justification: Why does the existing language ne	eed to be o	hanged?		
Do the changes affect either of the following ty	pes of spec	cifications	(Hover over type to go to site.):	
Special Provisions Developmental Specifi	-			
List Specifications Affected: (ex. SP3270301, De	v330TI De	v334TI =	tc)	

1. Are changes in line with promoting and making meaningful progress on improving safety, enhancing mobility, inspiring innovation, and fostering talent; explain how?
2. What financial impact does the change have; project costs, pay item structure, or consultant fees?
3. What impacts does the change have on production or construction schedules?
4. How does this change improve efficiency or quality?
5. Which FDOT offices does the change impact?
6. What is the impact to districts with this change?
7. Does the change shift risk and to who?
8. Provide summary and resolution of any outstanding comments from the districts or industry.
9. What is the communication plan?
10. What is the schedule for implementation?

CONTRACTOR QUALITY CONTROL GENERAL REQUIREMENTS. (REV 7-14-23)

SUBARTICLE 105-8.6.1 is deleted and the following substituted:

105-8.6 Concrete QC Personnel:

plastic property testing on concrete for materials acceptance at the project jobsite are qualified possess a CTQP Concrete Field Technicians Level 1 qualification. Plastic property testing will include but not be limited to slump, temperature, air content, water-to-cementitious materials ratio calculation, and making and curing concrete cylinders. Duties will-include initial sampling and testing to confirm specification compliance prior to beginning concrete placements, ensuring timely placement commencement of initial curinge, and providing for the transport of compressive strength samples to the designated laboratories. Ensure that personnel performing plastic property testing on self-consolidating concrete (SCC) possess an ACI Self-Consolidating Concrete Testing Technician Certification.

SUBARTICLE 105-8.6.2 is deleted and the following substituted:

105-8.6.2 Concrete Field Inspector - Level 2Self-Consolidating Concrete (SCC) Field Technician - Level 1: Ensure field inspectors responsible for the quality of concrete being placed on the following structure types are qualified CTQP Concrete Field Inspectors Level 2:

1. Moveable bridges
2. Bridges over a water opening of 1,000 feet or more
3. Bridges with a span of 190 feet or more
4. Cable supported or cable stayed bridges
5. Post-tensioned bridges
6. Steel girder or steel truss bridges
7. Multi-level roadways

With the exception of concrete traffic railing and bridge approach slab placements, a Level 2 Inspector must be present on the jobsite during all concrete placements. Prior to the placement of concrete, the inspector will inspect the element to be cast to ensure compliance with Contract Documents. A Level 2 Inspector's duties may include ensuring that concrete testing, inspection, and curing in the field are performed in accordance with the Contract Documents. The QC Inspector will inform the Verification Inspector of anticipated concrete placements and LOT sizes. Ensure technicians performing plastic property testing on self-consolidating concrete (SCC) for materials acceptance at the project jobsite possess a CTQP Self-Consolidating Concrete (SCC) Field Technician Level I qualification. Plastic property testing will include but not be limited to slump flow, rapid assessment of static segregation resistance, temperature, air content, water-to-cementitious materials ratio calculation, and making and curing SCC cylinders. Duties include initial sampling and testing to confirm specification compliance prior to beginning concrete placements, ensuring timely commencement of initial curing, and providing for the transport of compressive strength samples to the designated laboratories.

SUBARTICLE 105-8.6.3 is deleted and the following substituted:

105-8.6.32 Concrete Field Inspector - Level 2: Ensure field inspectors responsible for the quality of concrete being placed on the following structure types are qualified CTQP Concrete Field Inspectors Level 2:

- 1. Moveable bridges
- 2. Bridges over a water opening of 1,000 feet or more
- 3. Bridges with a span of 190 feet or more
- 4. Cable supported or cable stayed bridges
- 5. Post-tensioned bridges
- 6. Steel girder or steel truss bridges
- 7. Multi-level roadways

With the exception of concrete traffic railing and bridge approach slab placements, a Level 2 Inspector must be present on the jobsite during all concrete placements. Prior to the placement of concrete, the inspector will inspect the element to be cast to ensure compliance with Contract Documents. A Level 2 Inspector's duties may include ensuring that concrete testing, inspection, and curing in the field are performed in accordance with the Contract Documents. The QC Inspector will inform the Verification Inspector of anticipated concrete placements and LOT sizes.

SUBARTICLE 105-8.6 is expanded by the following new Subarticle:

105-8.6.43 Concrete Laboratory Technician – Level 1: Ensure technicians testing cylinders and recording concrete strength for material acceptance are qualified CTQP Concrete Laboratory Technicians Level 1. Duties include final curing, compressive strength testing, and the recording/reporting of all test data.

SUBARTICLE 105-8.7.1 is deleted and the following substituted:

105-8.7.1 Plant Manager of QC: Ensure that the plant manager of QC has at least three years of concrete related experience and the following training certifications:

- 1. CTQP Concrete Laboratory Technician Level 1 certificate.
- 2. CTQP Concrete Field Technician Level 1 certificate.
- 3. Concrete Batch Plant Operator certification in accordance with 105_-

8.7.4.

As alternatives to these certifications, the Department will accept, one of

a. Prestressed Concrete Institute (PCI) Quality Control Personnel

Certification Level III.

the following:

b. Precast Concrete Pipe, Box Culverts, Drainage Structures or Incidental Precast Concrete Plants Level II QC Inspector Certifications.

c. National Ready Mixed Concrete Association (NRMCA) Certified Concrete Technologist Level 2.

SUBARTICLE 105-8.7.2 is deleted and the following substituted:

- 105-8.7.2 Concrete Mix Designer: Ensure that the concrete mix designer has the CTQP Concrete Laboratory Technician Level 2 certification. As an alternative, the Department will accept any of the following qualifications:
- 1. PCI Quality Control Personnel Level III Certification, for concrete mix designs of prestressed concrete products.
- 2. National Ready Mix Concrete Association (NRMCA) Certified Concrete Technologist Level 3.
 - 3. Any of the Level II QC certifications in accordance with 105-8.9.2.2.

SUBARTICLE 105-8.8.1 is deleted and the following substituted:

- **105-8.8.1 Plant QC Manager**: Ensure the plant QC manager has at least five years of related experience and the following certifications:
 - 1. ACI Concrete Field Testing Technician Grade I-certification.
 - 2. PCI Quality Control Personnel Certification Technician/Inspector

Level III.

3. CTQP Prestressed Concrete Field Inspector/Technician certificate.

SUBARTICLE 105-8.8.2 is deleted and the following substituted:

105-8.8.2 QC Inspector/Technician: Ensure that the QC inspector/technician has the following certifications:

- 1. ACI Concrete Field Testing Technician Grade I certification.
- 2. PCI Quality Control Technician/Inspector Personnel Certification Level

II.

3. CTQP Prestressed Concrete Field Inspector/Technician certificate.

SUBARTICLE 105-8.8.3 is deleted and the following substituted:

105-8.8.3 QC Concrete Central Mix Testing Technicians: Ensure technicians performing QC program concrete testing at the plant possess the following qualifications, as appropriate. Ensure that QC testing personnel meet the requirement of 105-8.7.3.

1. CTQP Program Concrete Field Technician - Level I, for personnel performing concrete sampling and plastic property testing on concrete.

2. CTQP Program Self-Consolidating Concrete (SCC) Field Technician – Level I, for personnel performing concrete sampling and plastic property testing on SCC.

3. CTQP Concrete Laboratory Technician – Level I, for personnel

performing compressive strength testing on concrete.

SUBARTICLE 105-8.9.2.1 is deleted and the following substituted:

105-8.9.2.1 Level I Quality Control Inspectors: Ensure that the Level I Inspectors have the following certifications.

105-8.9.2.1.1 Precast Concrete Drainage Technician Level I:

PCI Quality Control Technician/<u>Inspector</u> Level I <u>certification</u>. As an alternative, a <u>current</u> Precast Concrete Quality Control <u>Technician Personnel</u> Level I certification in the respective work area will be accepted.

105-8.9.2.1.2 Incidental Precast Concrete Technician Level I:

PCI Quality Control Technician/<u>Inspector</u> Level I certification. As an alternative, a <u>current</u> Precast Concrete Quality Control <u>Technician Personnel</u> Level I certification in the respective work area will be accepted.

105-8.9.2.1.3 Precast Concrete Pipe Technician Level I: Precast

Concrete Pipe <u>Technician Personnel Level I certification</u>. <u>Personnel performing compressive</u> strength testing must possess an ACI Concrete Strength Testing Technician certification.

SUBARTICLE 105-8.9.2.2 is deleted and the following substituted:

105-8.9.2.2 Level II Quality Control Inspectors: Ensure that Level II Inspectors have the following certifications:

105-8.9.2.2.1 Precast Concrete Drainage Technician Level II:

1. Precast Concrete Drainage Technician Level I, in

accordance with 105-8.9.2.1.1.

2. PCI Quality Control Technician/Inspector Level II certification. As an alternative, a current Precast Concrete Quality Control Technician-Personnel Level II certification in the respective work area will be accepted.

3. CTQP Concrete Field Technician Level 1, if the plant produces structural concrete in accordance with Section 346.

105-8.9.2.2.2 Incidental Precast Concrete Technician Level II:

1. Incidental Precast Concrete Technician Level I, in

accordance with 105-8.9.2.1.2.

2. PCI Quality Control Technician/Inspector Level II certification. As an alternative, a current Precast Concrete Quality Control Technician-Personnel Level II certification in the respective work area will be accepted.

3. CTQP Concrete Field Technician Level 1.

4. Level II technicians who will perform quality control of

incidental prestressed products must have <u>possess</u> a <u>current</u> <u>certificate of completion of Section 450 Specification examination CTQP Prestressed Concrete Field Inspector certification</u>.

105-8.9.2.2.3 Precast Concrete Pipe Technician Level II:

1. Precast Concrete Pipe Technician Level I, in accordance

with 105-8.9.2.1.3.

2. Precast Concrete Pipe Technician Personnel Certification

Level II.

SUBARTICLE 105-8.9.2.3.2 is deleted and the following substituted:

105-8.9.2.3.2 Incidental Precast Concrete Facilities:

1. Incidental Precast Concrete Technician Level II in

accordance with 105-8.9.2.2.2.

2. CTQP Prestressed Concrete Field Inspector, Section 450

Specification Certification if the plant produces incidental prestressed products.

SUBARTICLE 105-8.9.2.4 is deleted and the following substituted:

105-8.9.2.4 Additional Requirements for Quality Control (QC)

Personnel of Precast Concrete Drainage Structures and Box Culverts, Precast Concrete Pipe, of and Incidental Precast Concrete Manufacturing Facilities:

105-8.9.2.4.1 Testing Personnel: Ensure testing technicians meet the requirement of 105-8.87.3.

105-8.9.2.4.2 Batch Plant Operator: Ensure the batch plant operator meets the requirement of 105-8.7.43.

SUBARTICLE 105-8.9.2 is expanded by the following new Subarticle:

105-8.9.2.5 Additional Requirements for Quality Control (QC)
Personnel of Precast Concrete Drainage Structures and Box Culverts Manufacturing
Facilities:

<u>105-8.9.2.5.1 Testing Personnel:</u> Ensure the testing technicians meet the requirements of 105-8.7.3.

<u>105-8.9.2.5.2 Batch Plant Operator:</u> Ensure the batch plant operator meets the requirement of 105-8.7.4.